



Water Gremlin Company

4400 OTTER LAKE ROAD., WHITE BEAR TOWNSHIP, MINNESOTA 55110, USA
651-429-7761 • 800-328-1440 • FAX 651-429-9611

August 15, 2019

Commissioner Laura Bishop
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155
Re: Letter Regarding Active trans 1,2-dichloroethylene

Dear Commissioner Bishop:

Late yesterday morning, Water Gremlin received your letter regarding the above referenced matter, along with notice that the letter would be officially sent to me that day. My Water Gremlin team and consultants immediately reviewed it closely. At the same time they revisited the Water Gremlin Remediation Investigation Report (Remediation Report) and the meetings they had with your staff to discuss the Remediation Report and next steps to take immediate action to mitigate building vapors. I am sending this letter based on the work they completed by the end of the day to provide a response to your letter and to request that you and your staff meet with my staff and consultants. As I have told your staff many times and now would like to tell you in person, Water Gremlin's goal is to ensure the protection of our workers and our neighbors while continuing to be a productive member of our community.

To put our response in context, it is important to point out the recent timeline of events. Your team received the Remediation Report on July 30 as scheduled, and we requested a meeting on July 31 to discuss the results and next steps. Your staff instead chose to wait and suggested a meeting date of August 6 for the discussion. Prior to that meeting, we received an August 5 letter from your staff notifying us that sub-slab vapor concentration results necessitated expedited installation of a vapor intrusion mitigation system "no longer than 30 days after receiving the analytical results" and that MPCA and MDH recommend notifying workers of those findings. Those recommendations were not a surprise to us and we were prepared to discuss them and our implementation strategy at the meeting we requested for July 31.

The August 6 meeting with your technical staff and managers lasted more than two hours and was very productive. One meeting item was our description of immediate actions Water Gremlin had already taken to mitigate sub-slab vapor issues. We informed your staff that Water Gremlin was reworking coater enclosure vents (moving recovery from the top of the enclosure to the bottom to capture the heavy vapors), that 6 of 10 coaters had been completely reworked and the remaining 4 would be reworked by August 9 (that work is completed).

You and your staff should know that subsequent to that meeting we have also taken the initiative to identify and implement additional actions to improve vapor recovery. These actions include extending vent ducting in Coating Room #3 to pull fugitive floor vapors from the room (completed August 8) and verifying/testing the negative pressure alarm parameters and notifications (completed August 12). All of those actions are outside of and in addition to actions requested by MPCA staff to improve vapor capture compared to the building operations that existed when the Remediation Plan investigation work was done.

In our August 6 meeting we also discussed the planned vapor mitigation system to be installed and implementation of the next investigation steps to better understand the Remediation Report results and better design permanent mitigation measures. Finally, even though your staff acknowledged that worker communication and safety issues are outside of MPCA's purview, we had a thorough discussion of employee notification issues.

The August 6 meeting went well and MPCA staff provided direction on next steps. My staff had a few questions regarding the MPCA's expected schedule for actions. In the interest of clarity I have attached the complete August 9 email exchange between my staff and yours regarding the MPCA's expected actions as a response to the Remediation Report.

As you can see from the emails, your staff confirmed that MPCA required that we have an expedited vapor intrusion mitigation system installed by August 30 and we committed to having one portion (a "skid") done by August 23 and the other two skids installed by August 30. MPCA staff also clarified their expectations regarding an interim mitigation work plan, employee communications and a Supplemental Investigation Work Plan. I can assure you that we take those deadlines seriously and are on track to meet them.

Next, let me provide some context regarding the Remediation Report results. Your letter did not provide any specific references from the Remediation Report or the related investigation data and we look forward to discussing the Remediation Report with you. As you can see below, our technical experts conclude that the DCE vapor issues do not pose any imminent or substantial risk to our workers, our neighbors or our environment and we are on track to expeditiously install the required vapor mitigation system while we also complete additional investigations.

First, your letter states that DCE is "present in soil samples taken below the building's sub-slab." Our technical staff has confirmed that in fact sampling identified DCE in vapor phase only. DCE in vapor was detected in the annular air space immediately beneath the floor of the manufacturing building. No current or historical sampling supports a release of DCE to site soils. No evidence of a spill of DCE or impact to soil has been identified as part of the Remedial Investigation.

In addition, it is important for our community to know that the movement of vapors beneath the slab is not expected to move beyond the building footprint. The movement of vapors to the sub-slab has occurred over a relatively short duration of time. The sampling identified DCE in vapor phase only, not in soil beneath the building. As noted above and as discussed with the MPCA on August 6 and 9, Water

Gremlin has and will be implementing measures to make sure that vapors do not move beyond the building system in the future.

On a similar note, your letter suggests that building operations are “causing the DCE emissions in the air to penetrate the concrete floor and migrate to the soil beneath the building.” The implication of a release of DCE to soil is incorrect. The collection of sub-slab samples directly beneath the concrete slab does not represent contamination to on-site soils, simply the presence of vapors in the annular space beneath the concrete slab. There is no evidence of a liquid release of DCE that would have the potential of contaminating soil has occurred at the Site.

Your letter also states the MPCA’s “significant concerns that DCE was discovered in the soil below the sub-slab given that Water Gremlin has only been using FluoSolv, the solvent that contains DCE, since March 1, 2019” and that “MPCA believes that the release of DCE is likely to continue as long as coating operations continue, resulting in additional DCE accumulation in the soil below the sub-slab.” Again, according to our technical experts, there is no evidence of a liquid release of DCE that would have the potential of contaminating soil has occurred at the Site. Water Gremlin has drafted a vapor response action plan that details full building vapor mitigation to address the potential vapor intrusion risk pathway. DCE and other VOCs in the sub-slab will be fully captured with this remedial approach. Water Gremlin committed to implementing this remediation as quickly as possible. There is no evidence or concern that the continued use of DCE in the coating process as the vapor mitigation system is being installed will exacerbate the issue. Our experts further conclude that the vapors that were detected in the air space beneath the building will be extracted once the vapor mitigation technologies and installed and operating.

Finally, let me assure you that our employee’s safety is our paramount concern and we have taken tremendous care to investigate potential vapor intrusion risks in our building. For example:

- On March 7, 2019 an Industrial Hygiene study was conducted to determine the exposure values on the new use of FluoSolv. All results of DCE air sampling ranged from 10.4-83.3 ppm and were all below OSHA Permissible Exposure Limit, NIOSH Recommended Exposure Limits, and ACGIH Threshold Limit Values of 200 ppm Time Weighted Average for an 8-hour workday.
- On August 8, 2019 an Industrial Hygiene study was conducted to determine Volatile Organic Compound (VOC) concentrations in the office areas following receipt Remedial Investigation results. Three offices measured ZERO and the remaining measured between 0.3 and 1.0 ppm VOC.
- On August 14, 2019 additional VOC monitors were set in the seven office areas, production office and chemical storage which will enable speciation and measurement of DCE down to ppb vs. ppm.

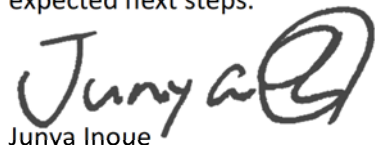
Your letter also caused us to reconfirm our air quality conclusions. We have confirmed our conclusion that there is no evidence that that DCE vapor is moving from the sub-slab into the ambient air. Water Gremlin continues to track its emissions of DCE as well as conduct ambient monitoring for DCE at five

locations surrounding the plant. The monitored concentrations are being compared to the Minnesota Department of Health (MDH) Chronic Risk Assessment Advice (RAA) level of 70 micrograms per cubic meter. This is the chronic level that MDH has determined to be safe, with measured concentrations to be evaluated as an annual average. The actual safe level is likely much higher than 70 ug/m3 as acute and subchronic inhalation studies do not provide evidence that inhalation of DCE leads to adverse health effects (see EPA's IRIS summary). Water Gremlin began ambient monitoring on March 1, 2019 concurrent with their manufacturing use of DCE. With a little more than 5 months of data the annual average RAA level of 70 micrograms per cubic meter has not been exceeded. Water Gremlin is tracking future monitored results to ensure that it is not exceeded as an annual average at any of the five monitored locations.

You can see from the information above that the vapor issues have been identified and we are implementing the MPCA's suggested response. Pursuant to MPCA direction we will have a vapor mitigation system installed and operating in just over two weeks. While we take these issues very seriously, no information suggests that the sub-slab DCE vapors present any threat to the people working in the building, our neighbors or our environment.

As I reviewed the information above I concluded that our best course of action is to invite you and your selected staff to visit us at our site. It is important for you to see for yourself the actions we have taken since the investigation was completed that was the basis of the Remediation Report. It is also important for you to see firsthand the vapor mitigation plan that we will implement before the end of the month. Finally, it appears that your letter is based on assumptions that are quite different from the conclusions our technical advisors see from the Remediation Report data. As such, we are requesting an immediate meeting with you and other appropriate MPCA personnel in order to understand these stark differences before any misinformation is released and before we commit to any course of action.

Your letter yesterday was shocking to me and my team because it varied so drastically from the direction we received from your technical staff. After our August 6 meeting we understood that your staff had thoroughly reviewed the Remediation Report and they gave us clear direction on tasks and schedule, which we are following.. We are committed to working cooperatively with MPCA and protecting health and the environment and hope that you will accept my request for a meeting to reach a common understanding of the Remediation Report results and to regain an understanding of the expected next steps.

A handwritten signature in black ink, appearing to read "Junya Inoue", with a stylized circular flourish at the end.

Junya Inoue
President, Water Gremlin Company

Cc: Jeff J. Smith, Sarah Kilgriff, Cory Boeck, Jennifer Carlson, Leslie Fredrickson, Colin O'Danovan, Deborah Klooz, Carl Dubois, Denise L'Allier-Pray, Peder Larson

Commissioner Bishop

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August 9 Email Exchange Regarding Expected Tasks and Schedule

From: Ginsbach, Michael (MPCA) [mailto:michael.ginsbach@state.mn.us]

Sent: Friday, August 09, 2019 6:02 AM

To: Denise L'Allier-Pray

Cc: Carlson, Jennifer M (MPCA); Larson, Peder A.; Carl Dubois; Aaron L. Benker; Chris G. Bratsch

Subject: RE: MPCA Schedule Issues

Denise,

Please see below for my clarifying comments. Please let me know if you have any further questions.

Thanks!

Michael

Michael Ginsbach | Hydrogeologist

Minnesota Pollution Control Agency (MPCA)

Remediation Division

520 Lafayette Road North | St. Paul, MN | 55155

651-757-2329

michael.ginsbach@state.mn.us | www.pca.state.mn.us



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From: Denise L'Allier-Pray <Denise.L'Allier-Pray@watergrem.com>

Sent: Thursday, August 08, 2019 1:20 PM

To: Ginsbach, Michael (MPCA) <michael.ginsbach@state.mn.us>

Cc: Carlson, Jennifer M (MPCA) <jennifer.m.carlson@state.mn.us>; plarson@larkinhoffman.com; Carl Dubois <Carl.Dubois@watergrem.com>; Aaron L. Benker <abenker@wenck.com>; Chris G. Bratsch <cbratsch@wenck.com>

Subject: FW: MPCA Schedule Issues

Michael and Jennifer,

Just so we are clear:

- 1) we must have an expedited vapor intrusion mitigation installed by 8/30. We can have one skid done by the 23rd, but the other two might take us right up to the 30th.

This is acceptable.

- 2) Interim work plan is due ??? in para 10 it says ten days in the closing it says one week

One week is the timeline for the interim vapor mitigation work plan for installation of the mitigation system.

Ten days is the timeline for the supplemental investigative work plan addressing the action items listed in 1-9.

- 3) EE notification letter should be done by tomorrow COB and delivered next week.

This is acceptable.

- 4) Sup investigation work plan is due 9/7.

The supplemental work plan for any investigation not covered by the action items in 1-9 is due in 30 days after receipt of the letter, which is September 7, 2019.

Thanks, Denise